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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/438,406	11/12/1999	BRIAN J. CLASSEN	C-3571	9272

25542 7590 04/22/2004

CNH INTELLECTUAL PROPERTY LAW DEPARTMENT  
CASE NEW HOLLAND INC.  
P.O. BOX 1895  
MS 641  
NEW HOLLAND, PA 17557

EXAMINER

WILSON, JACQUELINE B

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 04/22/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/438,406

Applicant(s)

CLASSEN ET AL.

Examiner

Jacqueline Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 12 November 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,3,4,7 and 8 is/are rejected.
- 7) ☐ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant's election without traverse of Group I (Claims 1, 3-8) in Paper No. 7 is acknowledged.

#### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show elements S<sub>A</sub> and S<sub>B</sub> as described in the specification (page 8). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, and 3-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamura (US 6,618,091).

Regarding Claim 3, Tamura teaches deriving a digital luminance signal from the analog video signal (fig. 1, microcomputer 15 obtains luminance data from camera signal processing means 10), analyzing the luminance (microcomputer 15) determining based on the analyzed luminance signal a first set of control signals including a first shutter speed control signal and a first analog gain signal (col. 2, lines 42+), the first set of control signals causing the luminance of a majority of pixels in a field of video to be below a first limit defining a workable range of luminance (see steps S1005 and S1006; this keeps the brightness of the image within a range), and determining from the first set of control signals a first set of color balance settings (col. 2, lines 3+; referred to as white balance control). Tamura teaches that during the first image capture, the control signals are obtained and applied to the next video as shown in the loop in Figure 1. During video capture, one having ordinary skill recognizes that a continuous stream of video fields is generated (fig. 9 indicates the different fields during a zoom operation).

Therefore, Tamura teaches that during a second field of video, applying the first shutter speed control signal, the first analog gain signal and the first set of color balance setting to the shutter speed, analog gain and color balance adjustment means respectively (see continuously loop in Fig. 1). Since this loop is continuous over the video capture operation, Tamura inherently teaches that the above operation repeats itself for correcting the third field of video, and so on.

Claim 1 is analyzed and discussed with respect to Claim 3. (See rejection of Claim 3 above.)

Regarding Claim 4, Tamura teaches determining a color offset for pixels in the next field of video (referred to as white balance; col. 3, lines 10+; see also loop of fig. 1).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura in view of Lee (US 6,219,447).

Regarding Claim 7, Tamura teaches a shutter speed control circuit (5), an analog gain circuit (8), an analog to digital converter (9), and a luminance and chrominance signal processing circuit responsive to the digital signal for producing a luminance signal and color difference signals for each pixel (10; see col. 1, lines 39+), circuit for obtaining a luminance value (see fig. 1; 10), a controller for developing a shutter speed control signal, an analog gain control signal and color gain control signals (15), the controller being responsive to the luminance value of the field of video. However, Tamura fails to specifically disclose a histogram counter responsive to the luminance signal for counting during one field the number of pixels having a luminance greater than a maximum level and for counting during a next field the number of pixels having a luminance less than a minimum level. However, Lee teaches histogram counters for counting pixels having a luminance greater than a maximum and counting the number of pixels having a luminance less than a minimum level (Fig. 2, col. 1, lines 55+). This is performed for the

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purpose of maintaining luminance information of the signal. Although Tamura is silent on how the luminance signal is obtained, it is notoriously well known in the art to use histogram counter for counting luminance levels, especially as shown in Tamura exposure loop for maintaining a balanced image signal. Therefore, it would have been obvious to one having ordinary skill in the art to use a histogram counter responsive to the luminance signal for counting during one field the number of pixels having a luminance greater than a maximum level and for counting during a next field the number of pixels having a luminance less than a minimum level. Thus, Tamura would obviously teach the controller controls the shutter and the analog gain for bringing the luminance of a majority of pixels below the maximum level, and above the minimum level of the succeeding field.

Regarding Claim 8, Tamura teaches deriving color gain control signals from the shutter speed control signal and the analog gain control signal (see fig. 3).

***Allowable Subject Matter***

5. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art neither teaches nor fairly suggests deriving a digital luminance signal, analyzing the luminance signal, determining a first set of control signals, determining a first set of color balance settings, during a second field of video applying the first set of control signals and first set of color balance settings, analog gain and color balance adjustment means, and repeating using a second field of view as taught in Claim 3, further deriving color difference

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signals U and V from the analog video signal for each pixel, and for each pixel, comparing V with a threshold value representing green to determine if a pixel is green. The examiner reviewed Clarke (WO 96/12401) which teaches comparing V with a threshold value representing green to determine if a pixel is green, but is unable to find motivation to combine Clarke with Tamura.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Wilson whose telephone number is (703) 308-5080. The examiner can normally be reached on 8:30am-5:00pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

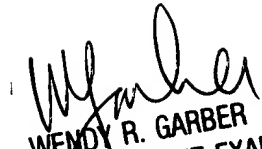
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04/16/04

  
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SUPERVISORY PATENT EXAMINER  
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